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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,747	11/28/2001	Hiroyuki Kuras	0879-0364P	8657

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EXAMINER

AGGARWAL, YOGESH K

ART UNIT	PAPER NUMBER
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2622

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	02/23/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/23/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

09/994,747

Applicant(s)

KURASE, HIROYUKI

Examiner

Yogesh K. Aggarwal

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4 and 9-17 is/are pending in the application.
- 4a) Of the above claim(s) 14 and 15 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16 is/are allowed.
- 6) ☒ Claim(s) 4, 9-13 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/22/2006 has been entered.

Response to Arguments

2. Applicant's arguments filed 11/22/2006 have been fully considered but they are not persuasive.

Examiner's response:

3. Applicant argues with regards to claim 17 that Habuto in view of Niwa fail to teach "a control device which controls the storing of captured image data in the memory card, wherein if the memory card capacity is less than the estimated amount of image data, the captured image data is stored in an internal memory of the image capturing device and if audio data is stored in the memory card, a selected audio data is deleted from the memory card and the captured image data is transferred from the internal memory to the memory card upon deletion of the audio data and if audio data is not stored in the memory the image capturing operation is inhibited". The Examiner respectfully disagrees.

Habuto was used to teach a device (e.g. MPU 19, col. 9 lines 64-64, figure 4) that estimates the amount of image data acquired from an image capturing operation (col. 12 lines 9-29) and a control device which controls the storing of captured image data in the memory card wherein if the memory card capacity is less than the estimated amount of image data, and if

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audio data is stored in the memory card, a selected audio data is deleted from the memory card (col. 12 line 30-col. 13 line 19, figure 8).

Niwa was merely used to teach that if a memory card is full, image data is stored in an internal memory and when a new memory card is inserted, the data is transferred into the memory card (col. 6 lines 6-27).

Therefore in the combination of references, Habuto teaches erasing of audio data from the memory card when the memory card is full to make space for images and Niwa teaches storing the image data in an internal memory until there is space in the external memory (by using a new memory card). Hence the combination of references teach the recited claimed limitations “wherein if the memory card capacity is less than the estimated amount of image data, the captured image data is stored in an internal memory of the image capturing device and if audio data is stored in the memory card, a selected audio data is deleted from the memory card and the captured image data is transferred from the internal memory to the memory card upon deletion of the audio data”

4. Regarding the newly recited limitations “if audio data is not stored in the memory, the image capturing operation is inhibited”, it would be obvious to one skilled in the art in Habuto that if Habuto does not have audio data stored in the memory card and the card becomes full, the image capturing operation cannot take place since the memory card is full.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4, 9 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ejima et al. (US PG-PUB # 2002/0027602), Habuto et al. (US Patent # 6,810,441) and further in view of Yamaoka (US Patent # 5,130,812).

[Claim 4]

Ejima et al. teaches a camera (figure 6) with audio reproduction function (Paragraph 60), comprising an image pick-up device (20) which converts an optical image into an electrical signal (Paragraph 54); an image-capturing instructing device (figure 1, element 10) which instructs the start of a picture taking operation with the image pick-up device (Paragraph 44), a signal processing device (31) which processes the electrical signal obtained by the image pick-up device to convert it into the image data (Paragraph 55), a recording device (24) which records the image data obtained by the signal processing device on a recording medium (Paragraph 56), a reproduction processing device (39) which reproduces an audio file recorded on the recording medium (Paragraph 60), an audio output device (5) which outputs the audio reproduced by the reproduction processing device audibly (Paragraph 116), an instruction input device (7) which instructs whether the deletion of audio file is permitted or not (Paragraphs 131-133).

Ejima et al. teaches a method of deleting an audio file (represented by the sound icon 63 in figure 10) employing an apparatus (figure 6) having a function of reproducing the audio file to be output as audio (Paragraphs 115-116), comprising reproducing the audio file selected as a deletion object to allow an operator to confirm whether or not a deletion object is correct (Paragraphs 131-133, 140-142, figures 10, 11, 13) but fails to teach a device which detects an empty capacity of the recording medium and determines an estimated recording data amount of

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image acquired by an image-capturing operation using the image pick-up device and a control device which controls selective deleting of an audio file from said recording medium, wherein when the empty capacity of the recording medium is less than the estimated recording amount; said control device controls selective deleting by controlling the deleting of the candidate deletion object upon determining that an operator is proceeding with a previously-initiated picture taking operation.

However Habuto et al. teaches a MPU 19 (col. 9 lines 64-64, figure 4), which detects an empty capacity of the recording medium and determines an estimated recording data amount of image acquired by an image-capturing operation using the image pick-up device (col. 12 lines 9-29). Habuto et al. further teaches selective deleting of an audio file from said recording medium 30 when the empty capacity is less than the estimated recording data amount (col. 12 line 30-col. 13 line 19, figure 8) in order to increase the recording capacity by erasing unnecessary data belonging to audio or voice category. Habuto also teaches that not only all audio (non-conforming) files can be deleted but also any one of the audio or voice file can be deleted by displaying the size of the file to be erased (col. 9 lines 11-21). In Habuto, when the user tries to capture another image of the subject, the digital still camera 10 displays under the control of the MPU 19, on the display unit 18, a message such as "no more images can be captured" as shown in the display screen D2 (col. 12 lines 20-24). It is noted that the user inherently presses a shutter button in order to start capturing an image. In subsequent steps (D3-D7), Habuto teaches erasing the voice files to make space for taking more images. After erasing, the camera is ready to capture more images. Therefore it is inherent in Habuto that a shutter or some sort of button is pressed in order to start capturing an image and if the memory is full, the camera displays a

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message such as “no more images can be captured” and the user then deletes the voice files to make space for taking more images. Thus Habuto teaches the newly added limitation of “deletion of candidate deletion object is performed in an image capturing sequence upon executing image capturing instructions during the picture taking operation”.

Therefore taking the combined teachings of Ejima and Habuto, it would have been obvious to one skilled in the art at the time of the invention to have been motivated to have a device which detects an empty capacity of the recording medium; a device which grasps an estimated recording data amount of image acquired by an image-capturing operation using the image pick-up device and controls selective deleting of an audio file from said recording medium wherein when the empty capacity of the recording medium is less than the estimated recording amount, said control device controls selective deleting by controlling said deletes the candidate deletion object upon determining that an operator is proceeding with a previously-initiated picture taking operation wherein deletion of music is performed in an image capturing sequence in order to increase the recording capacity for taking the image by erasing unnecessary data belonging to audio or voice category as taught in Habuto (col. 13 lines 17-19).

Ejima in view of Habuto fails to teach wherein said image-capturing instructing device is a shutter button, when it is released the shutter button to indicate that the candidate deletion object should be deleted.

However Yamaoka teaches that when a shutter button is half depressed, an audio file is erased so that if a user does not like a particular file a new audio file can be recorded (col. 19 lines 31-42).

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Therefore taking the combined teachings of Ejima, Habuto and Yamaoka, it would have been obvious to one skilled in the art at the time of the invention to have been motivated to have an image-capturing instructing device with a shutter button when it is released the shutter button to indicate that the candidate deletion object should be deleted so that if a user does not like a particular file a new audio file can be recorded by deleting the previous file.

[Claims 9 and 10]

Habuto teaches that after the display unit 18 displays a message such as “no more images can be captured” on the display screen D2 (col. 12 lines 20-24), only the first step of a picture taking operation, namely start of an image capture, as defined in claim 4 has taken place. Therefore a previously initiated picture taking operation is not completed or in other words it has stopped half way [as defined above]. Habuto further teaches that the user can choose different categories e.g. “erase data in another category” which has audio and voice files (D5 and D6) that the user can deselect by saying “no” (col. 12 lines 30-67) and therefore prevents deletion of a candidate deletion object or select any different file for deletion.

[Claims 11 and 12]

Yamaoka teaches that when a shutter button is half depressed, an audio file is erased so that if a user does not like a particular file a new audio file can be recorded (col. 19 lines 31-42).

[Claim 13]

Habuto teaches that the image cannot be captured (captured or saved) because the memory is full, so an audio file is deleted before capturing an image.

7. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Habuto et al. (US Patent # 6,810,441) in view of Niwa (US Patent # 6,538,692).

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[Claims 17 and 18]

Habuto teaches a video and audio device (figure 4) comprising an image-capturing device (camera unit 11) that converts received optical signals into captured image data (col. 9 lines 50-53);

an audio reproducing device that reproduces audio signals from digital audio data (col. 8 lines 23-26);

a memory card accessed by the image capturing device and audio reproducing device, that stores one or both of audio data and image data including image captured data (col. 10 lines 1-3);

a device (MPU 19, col. 9 lines 64-64, figure 4) that estimates the amount of image data acquired from an image capturing operation (col. 12 lines 9-29) and a control device which controls the storing of captured image data in the memory card wherein if the memory card capacity is less than the estimated amount of image data, and if audio data is stored in the memory card, a selected audio data is deleted from the memory card (col. 12 line 30-col. 13 line 19, figure 8). Regarding the newly recited limitations "if audio data is not stored in the memory, the image capturing operation is inhibited", it would be obvious to one skilled in the art in Habuto that if Habuto does not have audio data stored in the memory card and the card becomes full, the image capturing operation cannot take place since the memory card is full.

Habuto fails to teach that the image data is stored in a buffer memory while the memory card is full and transports it to the external memory upon deletion of the audio data from the memory card. However Niwa teaches that when the amount of picture coded data is larger than the amount of free space on the external medium needed to record, the image is recorded in an

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internal memory and transferred to the external medium when a new memory card is inserted (col. 6 lines 6-27).

Therefore taking the combined teachings of Habuto and Niwa, it would be obvious to one skilled in the art at the time of the invention to have been motivated to have the image data be stored in a buffer memory while the memory card is full and transports it to the external memory as taught in Niwa into the system of Habuto when the audio data is deleted in order for the user not to miss a picture taking opportunity while the memory card is full.

Allowable Subject Matter

8. Claim 16 is allowed.

See previous office action for notice of allowance.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yogesh K. Aggarwal whose telephone number is (571) 272-7360. The examiner can normally be reached on M-F 9:00AM-5:30PM.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571)-272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YKA

February 11, 2007


TUAN HO
PRIMARY EXAMINER